WHAT IS CLAIMED IS:

1. An image forming apparatus having at least one hardware item and at least one program for image formation, comprising:

an image data conversion part having at least one conversion function to convert a format of image data;

a resource management part determining a memory size required for a conversion function to convert the format of the image data; and

an image data management part acquiring a memory area corresponding to the determined memory size.

2. The image forming apparatus as claimed in claim 1, wherein the image data management part, in response to receipt of a request to convert the format of the image data from an application operating in accordance with the at least one program, acquires the

memory area.

3. The image forming apparatus as claimed in claim 1, wherein the image data management part, in response to activation of the image forming apparatus, acquires the memory area.

4. The image forming apparatus as claimed in claim 1, wherein the resource management part has convertible format information to indicate at least one format of image data that the at least one hardware item is able to convert corresponding to the memory size of the memory area acquired by the image data management part.

5. The image forming apparatus as claimed in

claim 1, wherein the image data conversion part uses a hardware item to convert the format of the image data.

6. The image forming apparatus as claimed in claim 5, wherein the hardware item includes a basic conversion part by default, and further includes at least one optional conversion part to provide an additional conversion function.

7. The image forming apparatus as claimed in claim 6, wherein the additional conversion function of the at least one optional conversion part is for improving an image quality of the image data.

8. The image forming apparatus as claimed in claim 6, wherein the additional conversion function of

the at least one optional conversion part is for converting a format of image data that the basic conversion part is not able to convert.

9. The image forming apparatus as claimed in claim 6, wherein the hardware item has hardware information regarding the basic conversion part and the at least one optional conversion part.

10. The image forming apparatus as claimed in claim 6, wherein the image data conversion part comprises a conversion management part managing the hardware item.

11. The image forming apparatus as claimed in claim 10, wherein the conversion management part has

device management information regarding the basic conversion part and the at least one optional conversion part.

12. The image forming apparatus as claimed in claim 11, wherein the conversion management part reports the device management information to the resource management part.

13. The image forming apparatus as claimed in claim 12, wherein the resource management part has resource management information regarding the basic conversion part and the at least one optional conversion part, and the resource management information is obtained based on the reported device management information.

14. The image forming apparatus as claimed in claim 13, wherein the resource management part has target memory size information to indicate a relation between combinations of the basic conversion part and the at least one optional conversion part and memory sizes of memory areas required to convert a format of image data by the combinations.

15. The image forming apparatus as claimed in claim 14, wherein the resource management part has combination information to indicate a relation between formats of image data and combinations of the basic conversion part and the at least one optional conversion part necessary to convert the formats.

16. The image forming apparatus as claimed in claim 15, wherein the resource management part determines a target memory size based on the resource

management information, the target memory size information, the combination information and a converted format.

17. The image forming apparatus as claimed in claim 16, wherein the resource management part, when the image data management part fails to acquire a memory area corresponding to the determined target memory size, determines a new target memory size based on the target memory size information.

18. The image forming apparatus as claimed in claim 16, wherein the resource management part, when the image data management part fails to acquire a memory area corresponding to the determined target memory size, determines a new target memory size through gradual size decreases from the determined target memory size based on the resource management information.

19. The image forming apparatus as claimed in claim 18, wherein the determined target memory size is gradually decreased based on a memory size required for each of the at least one optional conversion part.

20. The image forming apparatus as claimed in claim 16, wherein the resource management part, when the image data management part fails to acquire a memory area of the determined target memory size, determines a new target memory size through gradual size increases from a memory size required for the basic conversion part.

21. The image forming apparatus as claimed in claim 20, wherein the memory size required for the basic conversion part is gradually increased based on a memory

size required for each of the at least one optional conversion part.

22. The image forming apparatus as claimed in claim 16, wherein the resource management part determines the target memory size such that said target memory size is greater than or equal to a memory size obtained based on the resource management information and the target memory size information.

23. The image forming apparatus as claimed in claim 16, wherein the resource management part, when the image data management part fails to acquire a memory area required for the hardware item, determines the target memory size as a memory size required for a software item of the image data conversion part to convert the format of the image data.

24. A method of acquiring a memory area for an image forming apparatus having at least one hardware item for image formation, at least one application operating in accordance with at least one program for image formation, and an image data conversion part having at least one conversion function to convert a format of image data, the method comprising:

a size determination step of determining, in response to receipt of a request to convert a format of image data from an application of the image forming apparatus, a target memory size required to convert the format of the image data based on a conversion function of the image data conversion part corresponding to the image data and the converted format;

a memory area acquisition step of acquiring a memory area corresponding to the determined target memory size; and

a memory area release step of releasing the acquired memory area after the format of the image data is converted.

25. The method as claimed in claim 24, wherein the memory area acquisition step, when the memory area acquisition step fails to acquire the memory area corresponding to the determined target memory size, acquires a memory area to convert the format of the image data through gradual size decreases from the determined target memory size.

26. A method of acquiring a memory area for an image forming apparatus having at least one hardware item for image formation, at least one program for image formation, and an image data conversion part having at least one conversion function to convert a format of image data, the method comprising:

a size determination step of determining, in response to activation of the image forming apparatus, a target memory size required for a conversion function of the image data conversion part; and

a memory area acquisition step of acquiring a memory area corresponding to the determined target memory size and the conversion function.

27. The method as claimed in claim 26, wherein the memory area acquisition step, when the memory area acquisition step fails to acquire the memory area corresponding to the determined target memory size, acquires a memory area to convert the format of the image data through gradual size increases from a memory size smaller than the determined target memory size.